

Claims

- [c1] 1. A method of integrally forming an integrated structure of a light-guide board and an optical thin film, comprising:
providing the optical thin film, a mold, and a polarizer, wherein the mold has a first space and a second space;
disposing the optical thin film in the first space of the mold; and
injecting a light-guide material into the second space of the mold.
- [c2] 2. The method according to claim 1, wherein the step of providing the optical thin film includes a step of providing a multi-layer thin film.
- [c3] 3. The method according to claim 1, wherein the step of providing the optical thin film includes a step of providing a single-layer thin film.
- [c4] 4. The method according to claim 1, wherein the step of injecting the light-guide material includes injection molding, compression molding and injection compression molding.
- [c5] 5. The method according to claim 4, wherein the injection molding step uses a lying type injection machine.
- [c6] 6. The method according to claim 4, wherein the injection molding step uses a standing type injection machine.
- [c7] 7. The method according to claim 4, wherein the step of injecting the light-guide material includes injecting a polymer.
- [c8] 8. A method of integrally forming a structure of a light-guide board and an optical thin film, comprising:
providing the optical thin film, a polarizer, and a mold, wherein the mold has a first space and a second space;
disposing the optical thin film on one surface of the mold; and
injecting a light-guide material in the mold to fill another space without the optical thin film, and curing the light-guide material to form a light-guide board adhered to the optical thin film.

- [c9] 9. The method according to claim 8, wherein the step of providing the optical thin film includes a step of providing a multi-layer thin film.
- [c10] 10. The method according to claim 8, wherein the step of providing the optical thin film includes a step of providing a single-layer thin film.
- [c11] 11. The method according to claim 8, wherein the step of injecting the light-guide material includes injection molding, compression molding and injection compression molding.
- [c12] 12. The method according to claim 11, wherein the injection molding step uses a lying type injection machine.
- [c13] 13. The method according to claim 11, wherein the injection molding step uses a standing type injection machine.
- [c14] 14. The method according to claim 8, wherein the step of injecting the light-guide material includes injecting a polymer.
- [c15] 15. A method of integrally forming a structure with a light-guide board and an optical thin film, comprising providing a polarizer, disposing the optical thin film into a mold, and forming the light-guide board on a surface opposing to the optical thin film via an injection molding, a compression molding or an injection compression molding step.
- [c16] 16. The method according to claim 15, wherein the step of disposing the optical thin film includes a step of disposing a multi-layer thin film.
- [c17] 17. The method according to claim 15, wherein the step of disposing the optical thin film includes a step of disposing a single-layer thin film.
- [c18] 18. The method according to claim 15, further comprising using a lying type injection machine for forming the light-guide board.
- [c19] 19. The method according to claim 15, further comprising using a standing type injection machine for forming the light-guide board.